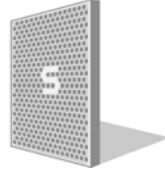


INSTALLATION / OWNER'S MANUAL

Schwank
INNOVATIVE HEATING SOLUTIONS



infrasave
radiant heaters

REMOTE CONTROL for Patio, Outdoor & Harsh Environment Infrared Heaters



FCC ID: PUC YCT-107
IC: 4163A-YCT107

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: This device may not cause harmful interference, and this device must accept any interference received including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC ID: PUC YCT-107
IC: 4163A-CMR-1000

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: This device may not cause harmful interference, and this device must accept any interference received including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. Such modifications could void the user's authority to operate the equipment.

MEMBER OF



**Canadian Restaurant
and Foodservices
Association**

Association canadienne
des restaurateurs et des
services alimentaires

NOTICE:

The Manufacturer reserves the right to make changes to equipment and specifications without obligation or notification.

This publication, or parts thereof, may not be reproduced in any form, without prior written consent from The Manufacturer. Unauthorized use or distribution of this publication is strictly prohibited.

*Schwank Group
5285 Bradco Boulevard
Mississauga, Ontario,
L4W 2A6
Phone: (905) 712-4766
Fax: (905) 712-8336
1-866-361-0417*

*InfraSave
Mississauga, Ontario,
Waynesboro, Georgia,
Phone: 1-866-INFRA SV (463-7278)
Fax: 1-866-724-9265
<http://www.infrasave.com>
e-mail: info@infrasave.com*

*PO Box 988, 2 Schwank Way
Waynesboro, Georgia,
USA 30830
Phone: (706) 554-6191
Fax: (706) 554 9390
1-877-446-3727*

e-mail: info@schwankgroup.com

<http://www.schwankgroup.com>

REMOTE CONTROL
for
Patio, Outdoor & Harsh Environment
Infrared Heaters

Table of Contents

Features and Specifications	3
Operation of Remote Controls: Overview	4
Programming / Setup of Receivers & Hand Set Transmitters	4
House Code Set-up	4
Unit Code Set-up	4
Graphic: Setup of Receivers & Hand Set Transmitters	5
Sample Patio Control System	6
Part Numbers: Remote control Systems	6
Receiver Kit Installation in Heater:	
JP-1234-RK: patioSchwank 2300 & IO-210 Series	7
JP-1234-TK: STW / IW & SPW / IWP Tube Heater Series	9
Wiring Diagrams:	
patioSchwank 2300 & IO-210 Series	8
STW / IW & SPW / IWP Tube Heater Series	11
Patio Sketch & Control Programming Aid	12

FEATURES AND SPECIFICATIONS


Receiver - (Model CMR-1000-24V)

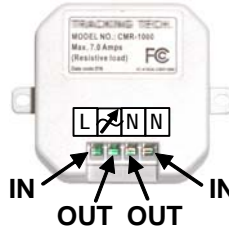
Kits: JP-1234-RK: 2300/IO-210 & JP-1234-TK: Tube Heaters

FEATURES:

- ‘House Code’ setting allows unique system “address” - avoids interference with neighboring systems
- Works with Hand Set Transmitter YCT-107
- Easily installed in heater

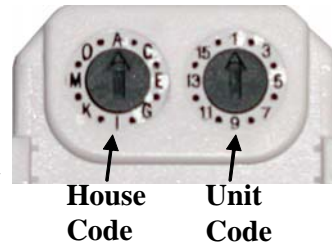
CONNECTION: (Wiring Diagrams Pages 8 and 11)

- Connect 24V AC Line source to “ L ”
- Connect 24V AC Neutral source to “ N ”
- Connect heater 24V AC Load to “  ”
- Connect heater 24V AC Neutral Load to “ N ”



CODE SWITCHES: Adjustable with ‘slot’ type screw driver

- **House Code: A to P:** Allows interference-free programming unique from that of a neighboring system; allows use of separate transmitter hand sets to control different patio areas at the same site
- **Unit Code: 1 to 16:** Unit Code matches to individual ‘On-Off’ buttons and Group Selection switch on hand set transmitter; Individual code for each receiver (or zones of heaters / receivers)



Hand Set Transmitter - (Model YCT-107) JP-1234-HS

OPERATION:

- 4 ‘Groups’ of 4 button sets = 16 On-Off functions
- House Code dial switch = 16 position - located on reverse side
- Battery: 12V (type 23A) one included



SPECIFICATIONS:

	Receiver	Hand Set Transmitter
Frequency	433.92 MHz	433.92 MHz
Power	12/24V +/- 10%; AC 50/60Hz.; or DC Max. Rating: 7 Amps	< 26μW Battery: 12V (type 23A)

CAUTION:

For safety, switch off main power before connecting, disconnecting or servicing.
DO NOT OVERLOAD

<p>FCC ID: PUC YCT-107 IC: 4163A-YCT107</p> <p>This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: This device may not cause harmful interference, and this device must accept any interference received including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. Such modifications could void the user’s authority to operate the equipment.</p>	<p>FCC ID: CMR-100 IC: 4163A-CMR1000</p> <p>This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: This device may not cause harmful interference, and this device must accept any interference received including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. Such modifications could void the user’s authority to operate the equipment.</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

OVERVIEW

The remote control hand set is used to turn patio heaters ON and OFF from a distance of up to 25 feet. Heaters must have a 24V Direct Spark Ignition system designed for automatic control.

One Transmitter Hand Set can control up to 16 individual heaters (receivers) or 16 zones of heaters.

- An ‘On-Off’ button must be pressed and held for 2 (two) seconds to activate the heaters/receivers.
- There is a ‘purge cycle’ time delay of up to 30 seconds before the heater will ignite.
- We recommend that any patio site have at least two Transmitter Hand Sets regardless of the number of heaters – one hand set is a secure back-up if the other is misplaced or malfunctions.

PROGRAMMING / SET UP *(Read this section prior to installation of receivers).*

- Follow the instructions below to set each receiver to the correct House & Unit Codes.
- **Complete the “Patio Floor Plan sketch and Settings Table” on the last page of this manual to assist you in the set up process.**
- Refer to the wiring diagrams in this manual for electrical connection of the receiver to the heater ignition system.

NOTE: THE LETTERS OR NUMERALS ON THE HOUSE CODE AND UNIT CODE ‘DIAL FACES’ INDICATE ONLY EVERY OTHER OR ‘ODD’ SETTING POSITION. THE IN-BETWEEN ‘EVEN’ POSITIONS ARE REPRESENTED BY A DOT (B,D,F,...) (2,4,6,...).

Setting the House Code – Adjust with slot screw driver

Set the same “house code” on the transmitter and any/all receivers that it is intended to control (16 codes available **A** to **P**). e.g.: If a hand set transmitter is set to house code “B”, all receivers set to house code “B” will be controlled by that transmitter.

The ‘house Code’ ensures that there will be no interference with any neighboring remote controlled appliances. This would include the setting of unique House Codes on multiple Transmitter Hand Sets that are used to control

Setting the Unit Code – Adjust with slot screw driver

The Transmitter Hand Set has a ‘Group Selection’ slide switch with 4 settings (**I, II, III, IV**) and 4 sets ‘On-Off’ buttons (**1, 2, 3, 4**). Hence there are four ‘On-Off’ buttons for each Group Setting and a total of 16 ‘On-Off’ functions on the Hand Set. *(see table —>)*

Each receiver has 16 unique ‘Unit Codes’ (numerals 1 to 16). The “Corresponding Settings” table *(to the right —>)* indicates the receiver setting that corresponds to each combination of Group switch and On-Off button on the Transmitter Hand Set.

Set a different ‘Unit Code’ on each receiver so that the Transmitter Hand Set can control up to individual 16 heaters.

NOTE: Within any zone of a patio best comfort is provided by the operation of two (or more) opposing heaters. All receivers (heaters) located in in the same ‘comfort zone’ can be set to the same ‘Unit Code’. All heaters in a common ‘comfort zone’ are thereby activated simultaneously by one common ‘On-Off’ switch. (There is no limit to the number of receivers that can be set to the same Unit Code.)

CORRESPONDING SETTINGS		
RECEIVER	TRANSMITTER	
UNIT CODE	GROUP SELECTION	ON-OFF BUTTON
1	I	1
2		2
3		3
4		4
5	II	1
6		2
7		3
8		4
9	III	1
10		2
11		3
12		4
13	IV	1
14		2
15		3
16		4

Also see next page for a description of setting codes in graphic format.

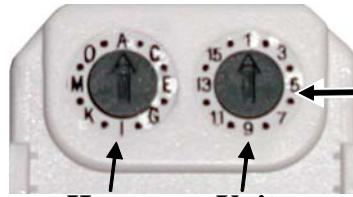
Complete the “Patio Floor Plan sketch and Settings Table” on the last page of this manual to assist you in the set up process.

SETTING UNIT CODES AND HOUSE CODES

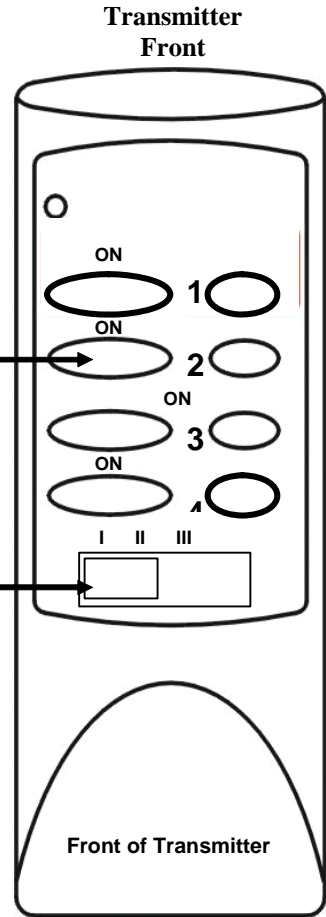
Unit Codes (16 Positions):

	On/Off Switch:	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Group I	selects Channels	1	2	3	4
Group II	selects Channels	5	6	7	8
Group III	selects Channels	9	10	11	12
Group IV	selects Channels	13	14	15	16

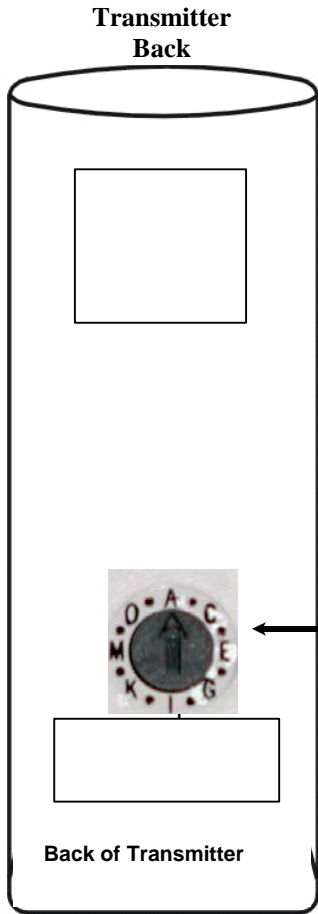
Select a unique unit code for each receiver or zone of receivers. The combination of Group & On-Off button selection matches to each unit code on each receiver.



House Code Unit Code

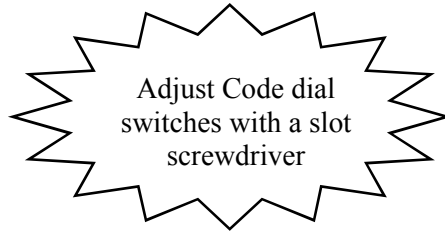


Transmitter Front



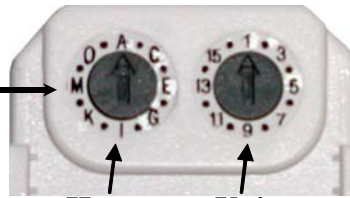
Transmitter Back

Back of Transmitter



House Codes (16 Positions):

For each area you wish to control with a separate transmitter, select a unique code from A to P. This avoids interference with neighboring control systems.



House Code Unit Code

Set the same 'House Code' on all Receivers & Transmitter(s) located in the same area.

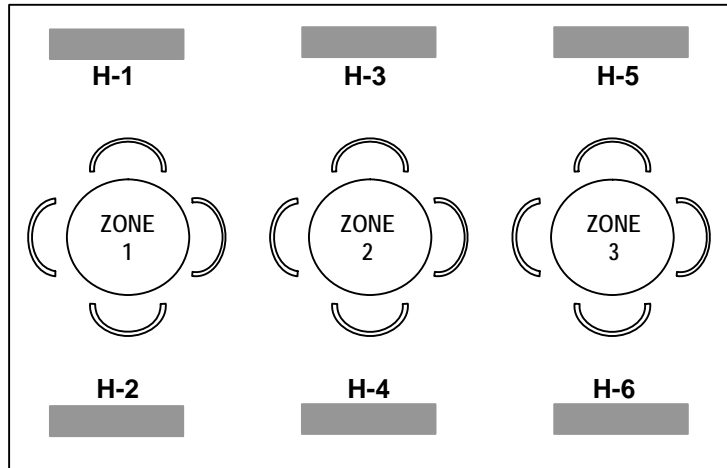
As a secure storage option for the Hand Set Transmitter, a set of Velcro strips is provided to fasten the Transmitter in a convenient site location.

One Battery: 12V (type 23A) is included with the Hand Set Transmitter.
 Replace the battery in the Hand Set each year at the start of the heating season .

Sample Patio Set-up:

Dining patio with 3 zones. Each zone has 2 opposing heaters that provide best comfort when operating simultaneously as a pair. The entire patio area will be controlled by one Hand Set Transmitter.

Set all 'House Codes' to the same Letter Code on one Hand Set Transmitter and six receivers (one in each heater). Heaters **H-1** & **H-2**: Set receiver Unit Codes to "1" - the hand set transmitter will activate both heaters in Zone 1 with **Group I / Button 1**.



Similarly, set receivers in heaters **H-3** & **H-4** to "2" and **H-5** & **H-6** to "3". Both Zone 2 heaters turn On/Off with button set "2" and both heaters in Zone 3 with button set "3".

Alternately, for individual control of heaters, set each receiver Unit Code to a unique number (**H-1** to "1", **H-2** to "2", etc.). Heaters **H-1** to **H-4** will be controlled by hand set transmitter **Group I - Buttons 1 to 4** and heaters **H-5** and **H-6** will be controlled by **Group 2 - Buttons 1 and 2**.

Kits / Part Numbers for Remote Control systems:

NOTE: Items are ordered separately

- **JP-1234-HS** REMOTE CONTROL HAND SET – Accessory; single item with Velcro fastener
- **JP-1234-RK** REMOTE CONTROL RECEIVER – **LUMINOUS HEATER**– Accessory Kit; Includes: receiver JP- 1234-RC, wires, Velcro Fastener, instructions
- **JP-1234-TK** REMOTE CONTROL RECEIVER – **TUBE HEATER** – Accessory Kit; Includes: receiver JP- 1234-RC, 24V Relay JS-0568-KT, wires, Velcro Fastener, instructions
- **JP-1234- RC** REMOTE CONTROL RECEIVER – Part; single item with Velcro fastener

Refer to the enclosed wiring diagrams:

- 2300 series Patio Heaters- Luminous Heater Page 8
- STW / IW & SPW / IWP Patio Heaters – Tube Heater Page 10

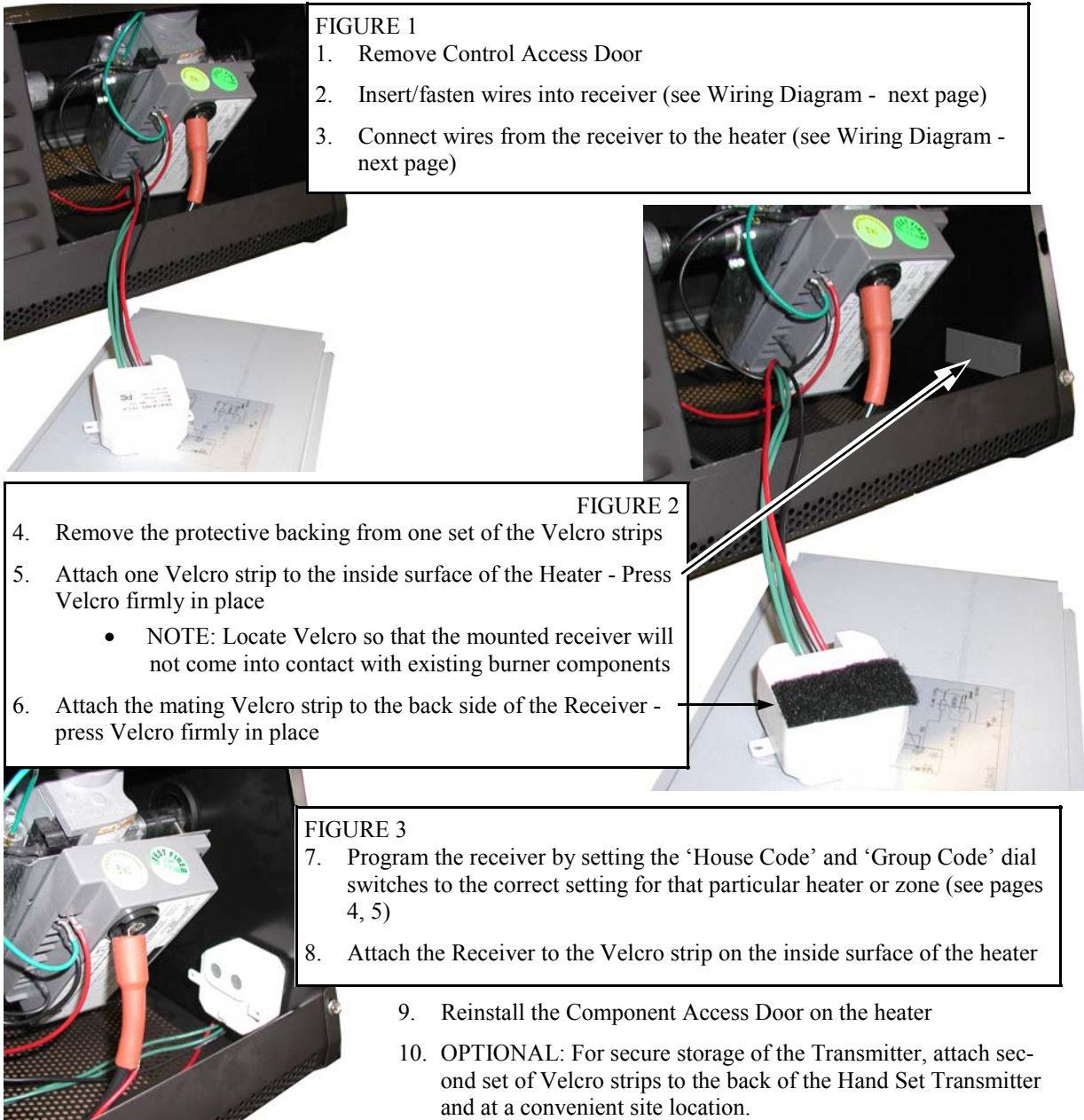
RECEIVER KIT INSTALLATION - JP-1234-RK

patioSchwank 2300 / IO-210 Series

- Read the Programming / Setup section (pages 4 & 5) prior to installation of the receiver into a heater.
- **Complete the “Patio Floor Plan sketch and Settings Table” on the last page of this manual to assist you in the installation & programming process.**
- Refer to the wiring diagrams (*next page*) in this manual for electrical connection of the receiver to the heater ignition system.

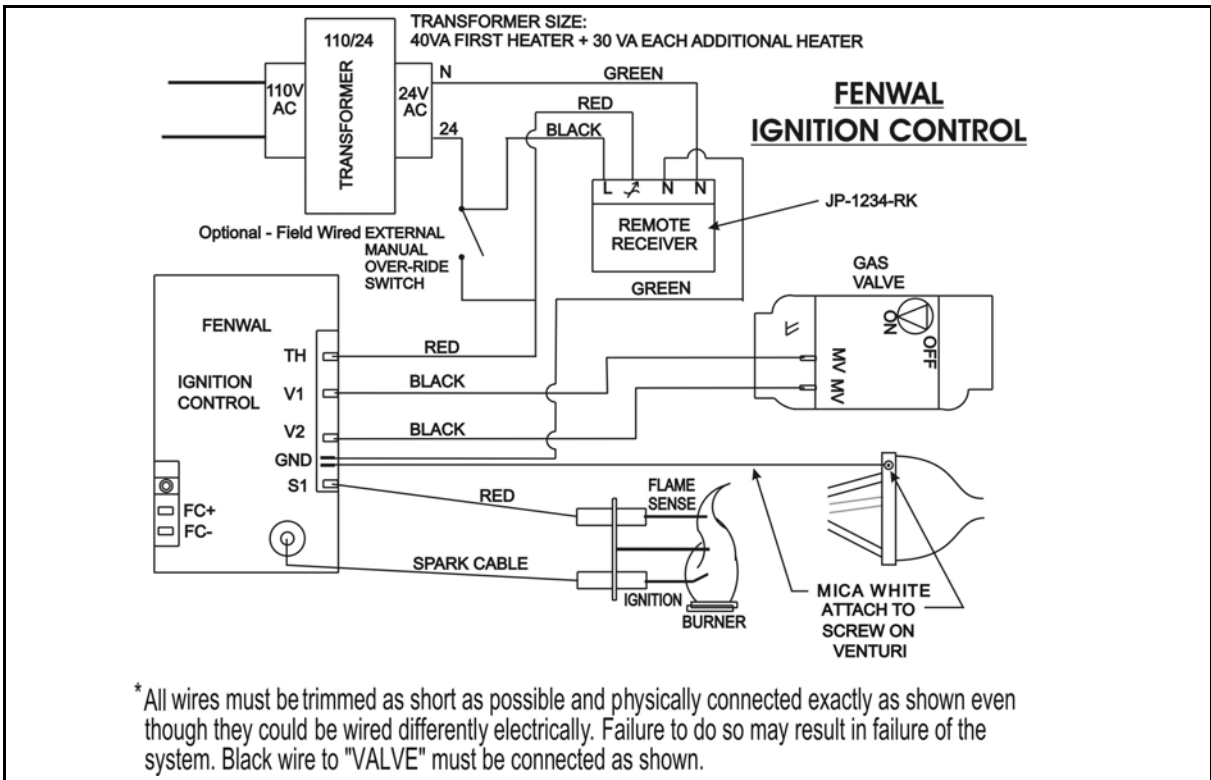
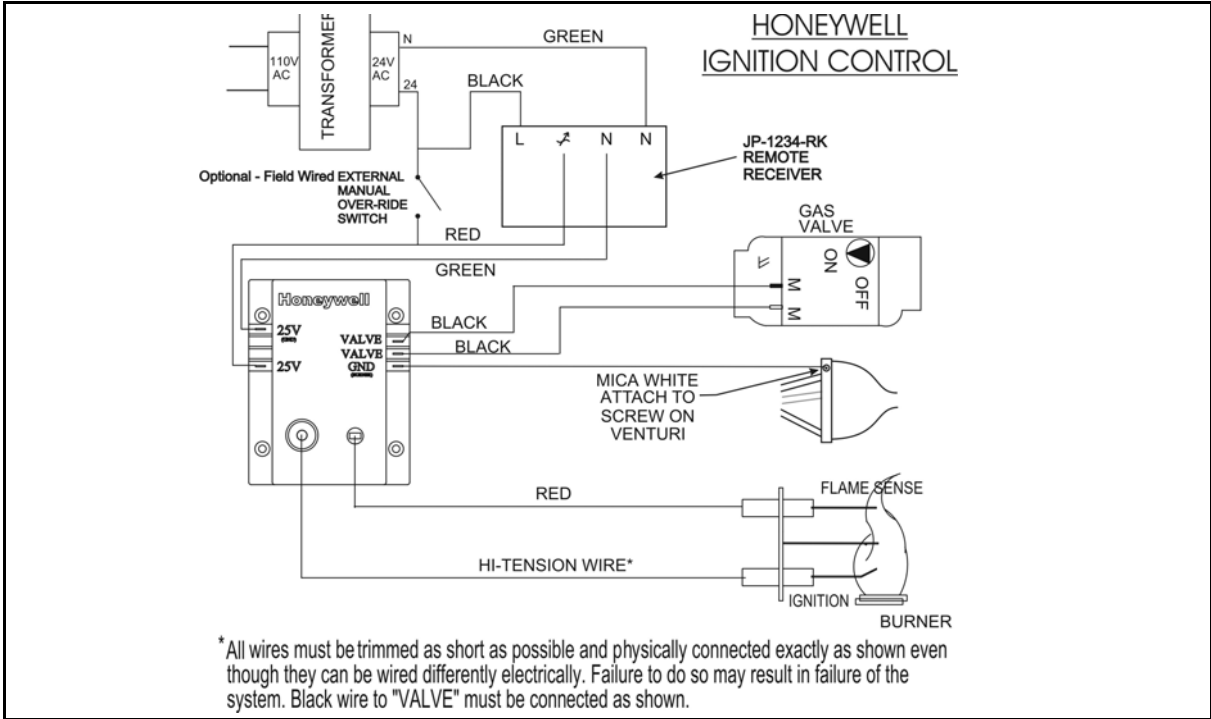
NOTE: We recommend the installation of an External Manual Over-ride Switch to allow temporary operation of the heater(s) if the Hand Set Transmitter is misplaced or malfunctions. (*Refer to Wiring Diagram*)

The Manual Over-ride Switch must be in the ‘Off’ position for the remote control system to operate.



Wiring Diagram: 2300 / IO-210 series Patio Heaters. Remote Control Kit: JP-1234-RK

NOTE: Recommended: Installation of an External Manual Over-ride Switch to allow temporary operation of the heater(s) if the Hand Set Transmitter is misplaced or malfunctions. The switch must be in the 'Off' position for operation of the remote control system.



RECEIVER KIT INSTALLATION - JP-1234-TK

SPW / IWP Tube Heater Series

(Model STW / IW is shown below—follow the same instructions for SPW / IWP)

- Read the Programming / Setup section (pages 4 & 5) prior to installing the receiver into a heater.
- **Complete the “Patio Floor Plan sketch and Settings Table” on the last page of this manual to assist you in the installation & programming process.**
- Refer to the wiring diagram (following these pages) in this manual for electrical connection of the 24V Relay and receiver to the heater ignition system.

NOTE: We recommend the installation of an External Manual Over-ride Switch to allow temporary operation of the heater(s) if the Hand Set Transmitter is misplaced or malfunctions. (Refer to Wiring Diagram)

The Manual Over-ride Switch must be in the ‘Off’ position for the remote control system to operate.



FIGURE 1

1. Remove burner side panel (electrical cord side) by removing all fastening screws
 2. Remove 2 screws in the end of the housing that secure the component plate inside the housing
- NOTE: Retain all screws for reattachment of component plate & side panel

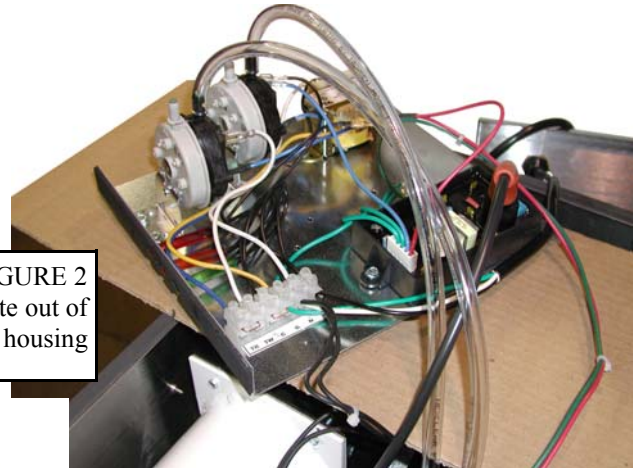


FIGURE 2

3. Slide component plate out of burner housing

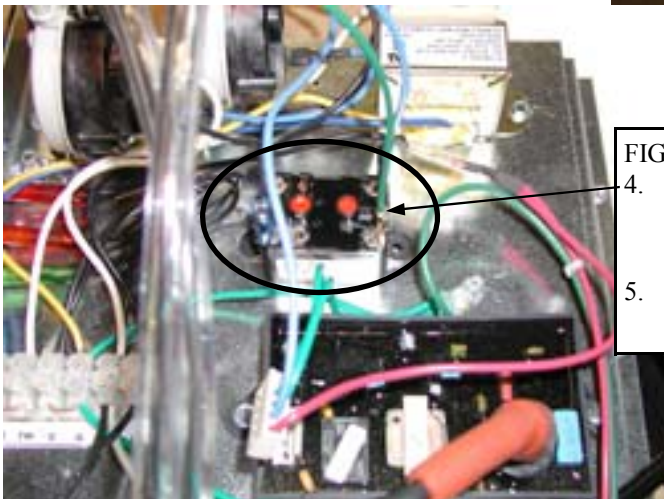


FIGURE 3

4. Install the 120V/24V Relay Switch on to the component plate; align to the predrilled holes in the plate and fasten with bolts/nuts provided.
5. Connect wiring as indicated in the Wiring Diagram (page 11).

SPW / IWP Tube Heater Series

RECEIVER INSTALLATION (Continued)

6. Insert the wires provided into the Receiver unit as per Wiring Diagram (next page).
7. Remove (snip off) any female spade connectors from wires from the receiver
8. Connect wires to the terminal block on the component plate as indicated in the Wiring Diagram (next page)
9. Replace component plate in the burner housing, align with holes in the end of the housing
10. Fasten component plate in place with two screws at the end of the housing

FIGURE 4

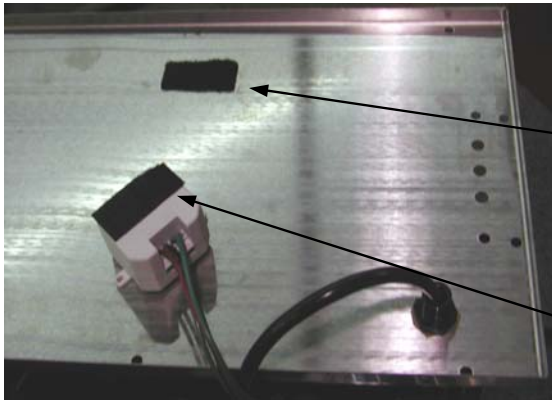
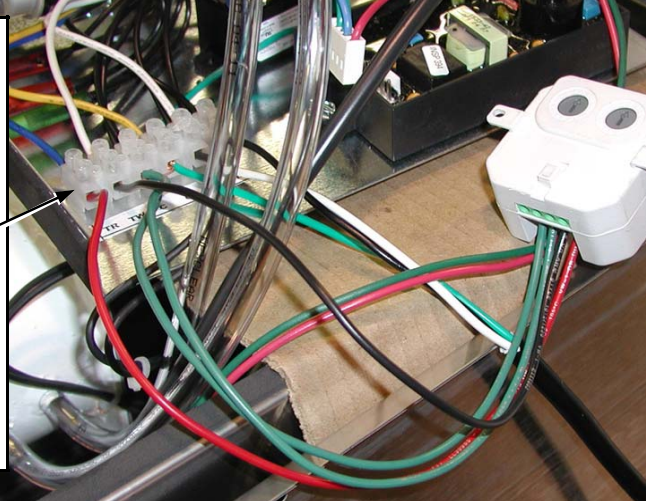
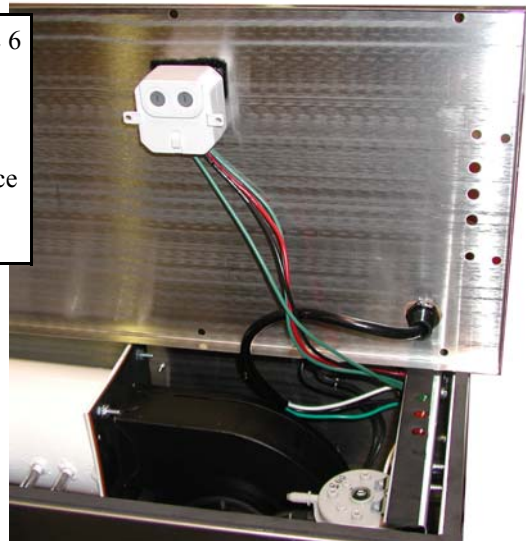


FIGURE 5

10. Remove the protective backing from one set of the Velcro strips provided to reveal the adhesive
11. Attach one Velcro strip to the inside surface of the burner housing side panel—Press firmly in place
 - NOTE: Locate Velcro so that the mounted receiver will not come into contact with existing burner components when the side panel is reattached
12. Attach the mating Velcro strip to the back side of the Receiver—press Velcro firmly in place

13. Program the receiver by setting the 'House Code' and 'Group Code' dial switches to the correct setting for that particular heater or zone (see pages 4, 5)
14. Attach the Receiver to the Velcro strip on the inside surface of the housing side panel

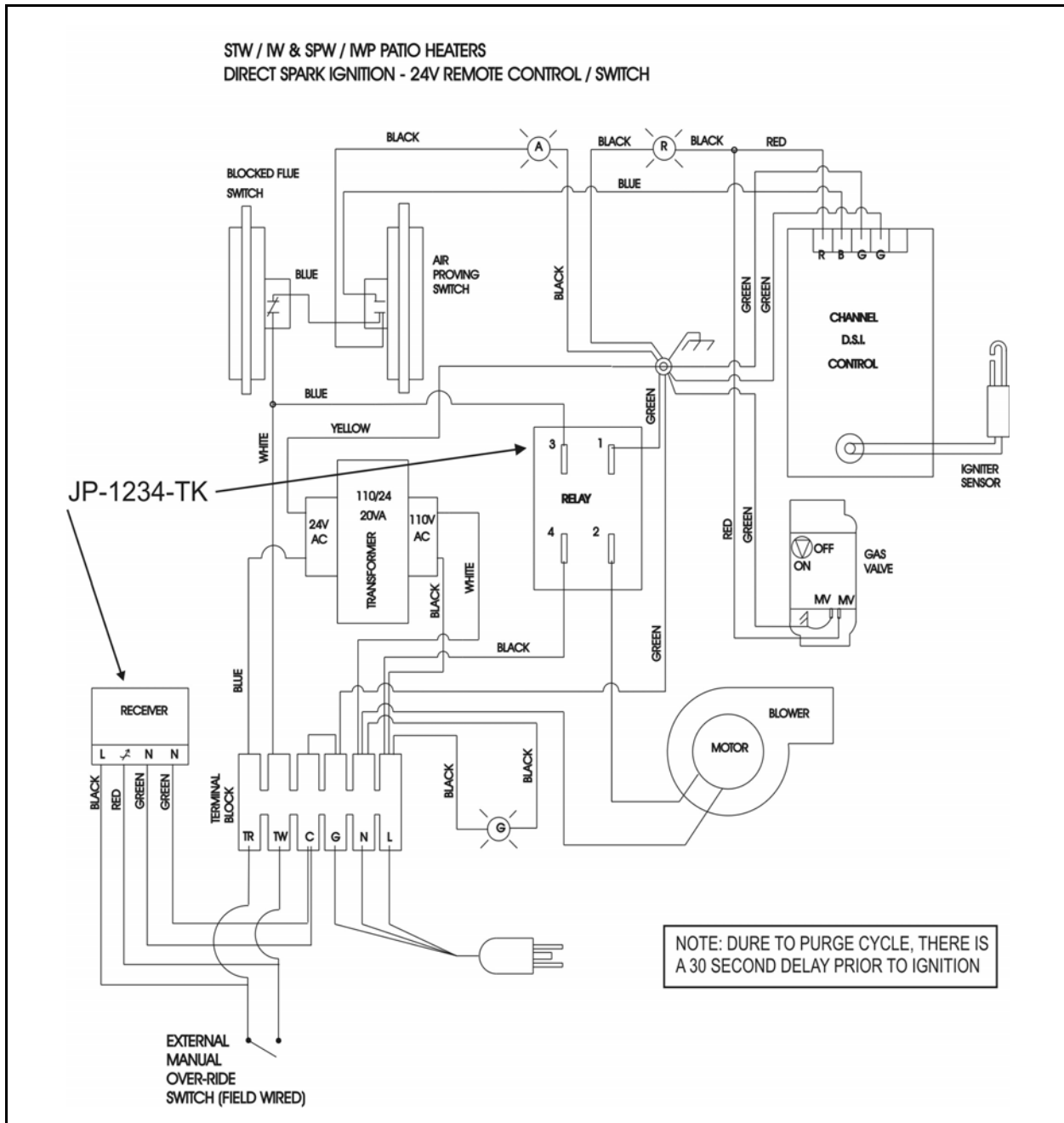
FIGURE 6



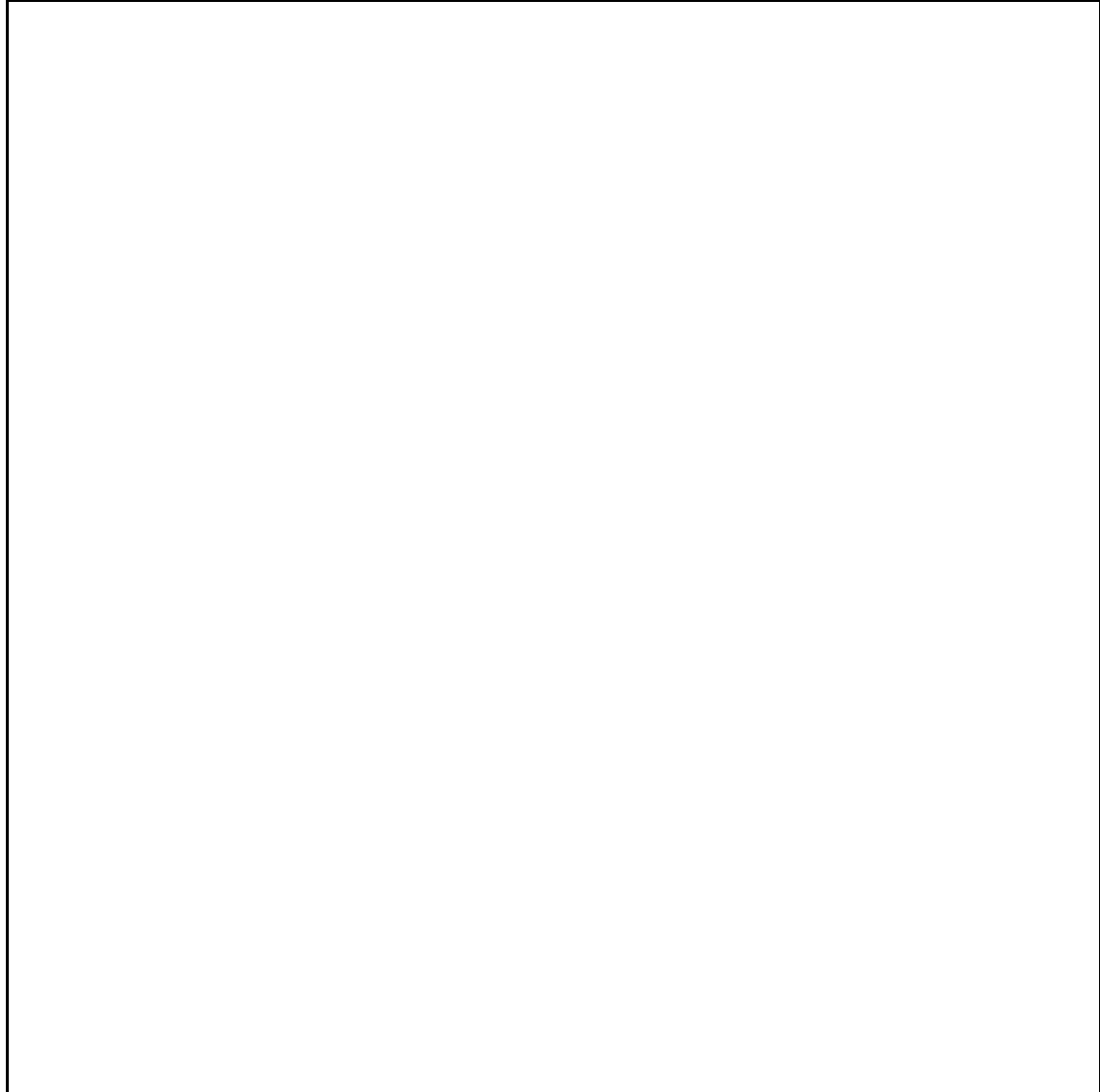
15. Reattach the side panel to the burner housing
16. OPTIONAL: For secure storage of the Transmitter, attach second set of Velcro strips to the back of the Hand Set Transmitter and at a convenient site location.

Wiring Diagram: SPW / IWP Tube Heater series Patio Heaters Remote Control Kit: JP-1234-TK

NOTE: Recommended: Installation of an External Manual Over-ride Switch to allow temporary operation of the heater(s) if the Hand Set Transmitter is misplaced or malfunctions.
The switch must be in the 'Off' position for operation of the remote control system.



Use this area to sketch a 'Floor Plan' of the patio and heater layout. Assign a number or letter 'tag' to each heater (or pair of heaters) to assist in the set up of receivers.



NOTE:

1. Set the 'House Code' of any receiver to the same 'House Code' setting on the hand set that will control it.
2. It is recommended that any patio site have a spare or back-up Hand Set Transmitter that can be put into service if a first Hand set malfunctions or is misplaced. Set up any spare or back-up hand set(s) to the same 'House Code' as the first hand set.

CORRESPONDING SETTINGS			
HEATER 'TAG'	RECEIVER	TRANSMITTER	
	SET UNIT CODE TO	GROUP SELECTION	ON-OFF BUTTON
	1	I	1
	2		2
	3		3
	4		4
	5	II	1
	6		2
	7		3
	8		4
	9	III	1
	10		2
	11		3
	12		4
	13	IV	1
	14		2
	15		3
	16		4

Complete this "Settings Table" to assist in the set up of receivers and assignment of Hand Set control buttons to heaters.

LEAVE A COPY OF THIS SHEET WITH THE END-USER